

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently amended) ~~A coal-bed-methane water treatment system~~ An apparatus for treating coal-bed-methane water, ~~said coal-bed-methane water treatment system~~ the apparatus comprising:

a pump ~~system for delivering to deliver~~ water from ~~one or many~~ at least one coal-bed-methane ~~wells~~ well into a common reservoir; and

a ~~solid-based sulfurous generator that produces~~ generator to produce aqueous sulfurous acid to treat the coal-bed-methane water ~~that is contained in the reservoir; and~~

an injection system that injects to inject soluble gypsum into at least one of the aqueous sulfurous acid and the coal-bed-methane water to further treat the coal-bed-methane water in the reservoir.

2. (Currently amended) The apparatus ~~according to~~ of claim 1, further ~~including~~ comprising a control system for ~~controlling to control~~ the ~~a~~ water flow rate through the ~~solid-based sulfurous generator to achieve the a~~ desired concentration of sulfurous acid ~~in the coal-bed-methane water being treated.~~

3. (Currently amended) The apparatus ~~according to~~ of claim 2, wherein ~~said the~~ control system ~~includes~~ comprises a pH sensor for ~~ascertaining to ascertain~~ the pH of the coal-bed-methane water being treated; a controller connected to said the pH sensor for ~~receiving to receive~~ a signal representative of the pH, comparing ~~said the~~ signal to a set point for a desired water pH,

and providing an output control signal, ~~which affects a flow to a~~ control means ~~connected to said~~ controller for ~~adjusting to adjust~~ the water flow rate through said solid-based sulfurous generator to achieve ~~the a~~ desired concentration of sulfurous acid ~~in the water being treated~~.

4. (Currently amended) The apparatus according to of claim 3, wherein ~~said flow the~~ control means includes comprises a variable frequency drive (VFD) for ~~adjusting the pump speed~~ to ~~control to adjust~~ the water flow rate of water through said solid-based sulfurous generator, said pump system being the pump system that delivers coal-bed methane water to said solid-based sulfurous generator.

5. (Currently amended) The apparatus according to of claim 3, wherein ~~said flow the~~ control means includes comprises a variable frequency drive (VFD) ~~for adjusting to adjust the~~ water flow rate through a valve to ~~control the flow rate of water through said solid-based~~ sulfurous generator, ~~said the valve being located between said solid-based sulfurous the generator~~ and said pump system that delivers water to said solid-based sulfurous controlling the water flow rate through the generator.

6. (Currently amended) The apparatus according to of claim 2, wherein ~~said the~~ control system includes comprises a flow rate sensor ~~for determining to measure~~ the water flow rate of ~~water into said reservoir through the generator~~; a controller connected to ~~said the~~ flow rate sensor ~~for receiving to receive~~ a signal representative of the flow rate and ~~providing to provide~~ an output control signal to a flow control means ~~connected to said controller for adjusting to adjust~~ the

water flow rate through ~~said solid-based sulfurous~~ the generator to achieve ~~the a~~ desired concentration of sulfurous acid ~~in the water being treated~~.

7. (Currently amended) The apparatus ~~according to~~ of claim 2, wherein ~~said the~~ control system ~~further includes~~ comprises a feed load cell for ~~determining to determine~~ the weight of sulfur ~~being fed to said solid-based sulfurous~~ the generator.

8. (Currently amended) The apparatus ~~according to~~ of claim 7, further ~~including~~ comprising a timer circuit for ~~calculating the to calculate a~~ feed burn rate based on ~~the a~~ change ~~in the of an~~ output of the feed load cell over time.

9. (Currently amended) The apparatus ~~according to~~ of claim 2, wherein ~~said the~~ control system ~~further includes~~ comprises a flow meter for ~~measuring to measure~~ the water flow rate of water through ~~said solid-based sulfurous~~ generator.

10. (Currently amended) The apparatus ~~according to~~ of claim 2, wherein ~~said the~~ control system ~~further includes~~ comprises a timer for to selectively starting start and stopping said ~~solid-based sulfurous~~ stop the generator.